

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/007050

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ H04H1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ H04H1/00, H04N5/44, G06F15/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Kokai Jitsuyo Shinan Koho	1971-2004	Jitsuyo Shinan Toroku Koho	1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2001-157136 A (Kenwood Corp.), 08 June, 2001 (08.06.01), Par. Nos. [0055], [0061]; Fig. 2(a) (Family: none)	1, 6, 13 2-5, 7-12
X Y	JP 2003-46459 A (K Laboratory Co., Ltd.), 14 February, 2003 (14.02.03), Par. Nos. [0014] to [0020]; Fig. 2 (Family: none)	1, 6, 13 2-5, 7-12
Y	JP 7-236099 A (Hitachi, Ltd.), 05 September, 1995 (05.09.95), Par. Nos. [0021] to [0024]; Fig. 1 & US 5726702 A column 8, line 29 to column 9, line 39; Fig. 1 & EP 0669761 A2 & CN 1119390 A & JP 7-240881 A	2, 3, 5, 7, 8, 10

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
16 June, 2004 (16.06.04)

Date of mailing of the international search report
29 June, 2004 (29.06.04)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/007050

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 7-500715 A (MANKOVITZ, Roy, J.), 19 January, 1995 (19.01.95), Abstract; page 5, lower right column, line 20 to page 6, lower right column, line 28; Fig. 4(b) & WO 1994/000842 A1 abstract; description, page 7, line 31 to page 11, line 17; Fig. 4(b) & AU 4644493 A & CA 2115772 A & EP 604639 A1	2,3,4,7,8,9
Y	JP 2003-44477 A (Yamaha Corp.), 14 February, 2003 (14.02.03), Abstract (Family: none)	4,9
Y	JP 2003-69915 A (Fujitsu Ten Ltd.), 07 March, 2003 (07.03.03), Abstract (Family: none)	5,10
Y	JP 2002-358283 A (NEC Corp.), 13 December, 2002 (13.12.02), Par. Nos. [0043] to [0050]; Fig. 2 (Family: none)	11,12
Y	JP 2000-222360 A (Matsushita Electric Industrial Co., Ltd.), 11 August, 2000 (11.08.00), Par. Nos. [0078] to [0086]; Figs. 5, 6 (Family: none)	11,12
A	JP 5-219053 A (Nippon Telegraph And Telephone Corp.), 27 August, 1993 (27.08.93), Full text; Figs. 1 to 7 (Family: none)	11,12
A	JP 10-336169 A (Nihon Unisys, Ltd.), 18 December, 1998 (18.12.98), Full text; Figs. 1 to 19 & US 6148404 A	11,12
A	JP 2003-92556 A (Sony Corp.), 28 March, 2003 (28.03.03), Full text; Figs. 1 to 13 (Family: none)	1-13
A	JP 9-247565 A (Sony Corp.), 19 September, 1997 (19.09.97), Full text; Figs. 1 to 13 (Family: none)	1-13

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/007050

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2003-18488 A (Toshiba Corp.), 17 January, 2003 (17.01.03), Full text; Figs. 1 to 3 (Family: none)	1-13
A	JP 9-270673 A (Matsushita Electric Industrial Co., Ltd.), 14 October, 1997 (14.10.97), Fig. 18 & CN 1164777 A & EP 798921 A2 & KR 97068545 A & TW 335574 B & US 6166778 A	1-13

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/007050

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

(See extra sheet)

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/007050

Continuation of Box No.III of continuation of first sheet (2)

- (1) Because of the reasons described below, this international application includes four groups of inventions which do not satisfy the requirement of unity of invention.

Main group of inventions: claims 1-3, 6-8, 13

Second group of inventions: claims 4, 9

Third group of inventions: claims 5, 10

Fourth group of inventions: claims 11, 12

- (2) The technical feature of claim 6 which is considered to be a technical feature common to claims 6-12 makes no contribution over the prior art since it is disclosed in:

Document: JP 2001-157136 A (Kenwood Corp.), 08 June, 2001 (08.06.01), paragraphs 0055, 0061, Fig. 2A, and

Document: JP 2003-46459 A (K Laboratory Co., Ltd.), 14 February, 2003 (14.02.03), paragraphs 0014 to 0020, Fig. 2.

Accordingly, the technical feature of claim 6 cannot be "a special technical feature" within the meaning of PCT Rule 13.2, second sentence.

- (3) The special technical feature of claims 7 and 8 relate to "storing in advance the broadcast station names, frequencies, and call signs while correlating them, receiving/reproducing a broadcast signal of the frequency of the broadcast station selected by a first operation, transmitting the request information including the call sign of the broadcast station selected by the first operation, receiving/displaying the associated information, transmitting the request information including a call sign of the broadcast station selected by a second operation, receiving the associated information, and switching the display".

The special technical feature of claim 9 relates to "transmitting at a particular interval a plurality of the associated information respectively containing call signs of a plurality of broadcast stations stored in advance, receiving the respective associated information, and simultaneously displaying the received associated information."

The special technical feature of claim 10 relates to "displaying whether associated information from the broadcast station whose transmission signal is being received is displayed."

The special technical feature of claims 11 and 12 relates to an operation associated with authentication.

Accordingly, there exists no special technical feature common to claims 7-8, claim 9, claim 10, and claims 11-12.

- (4) Furthermore, since the technical feature of claims 1-5 is substantially identical to that of claims 6-10, the same discussion made in (2) and (3) for claims 6-10 applies to claims 1-5.

The technical feature of claims 13 is also substantially identical to that of claim 6.

- (5) Considering (2) to (4), the main group of inventions, the second group of inventions, the third group of inventions, and the fourth group of inventions classified in (1) are not so linked as to form a technical relationship including a single special technical feature.